

Fig. 1: Block diagram of a vending machine of the mechanical type

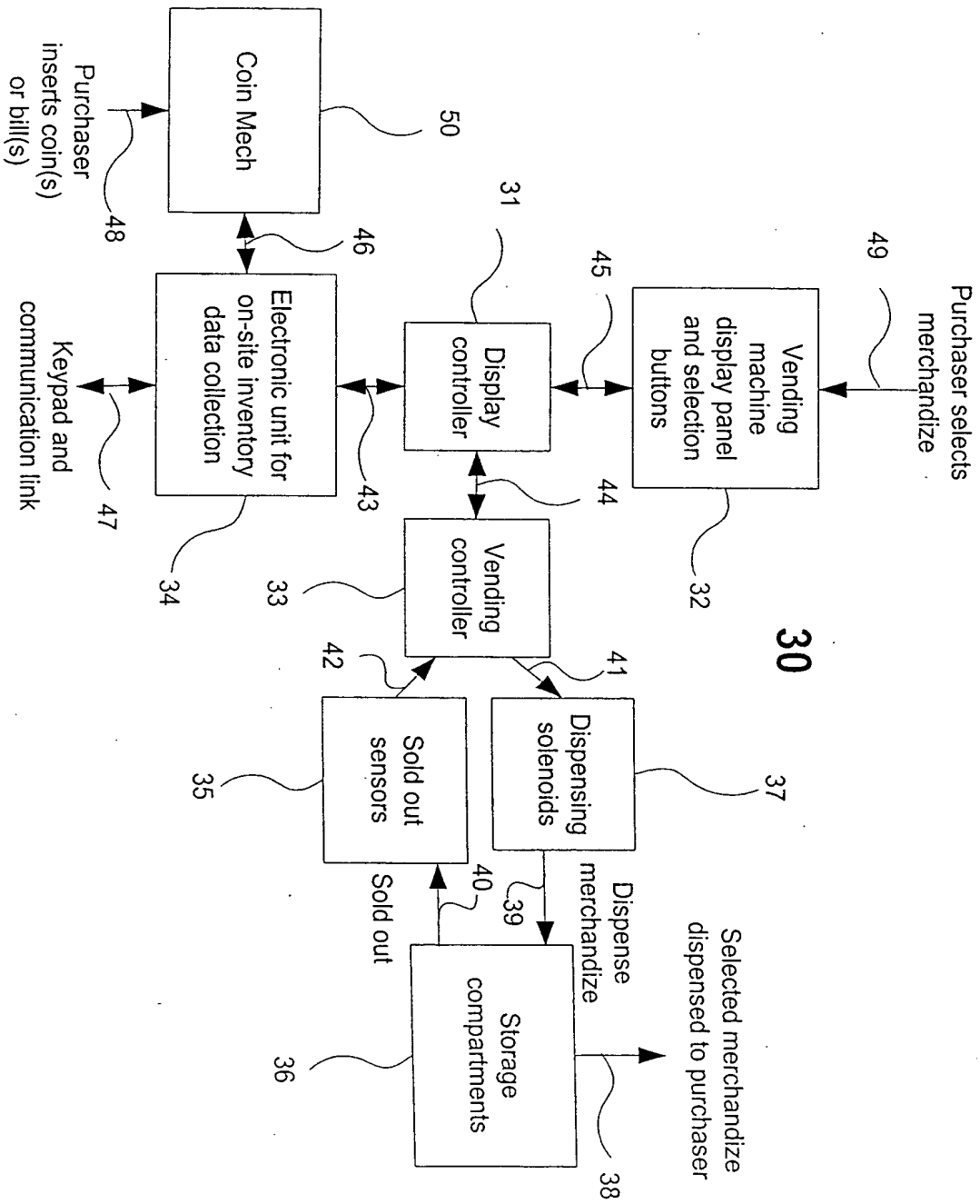


Fig. 2: Block diagram of a vending machine of the electronic type

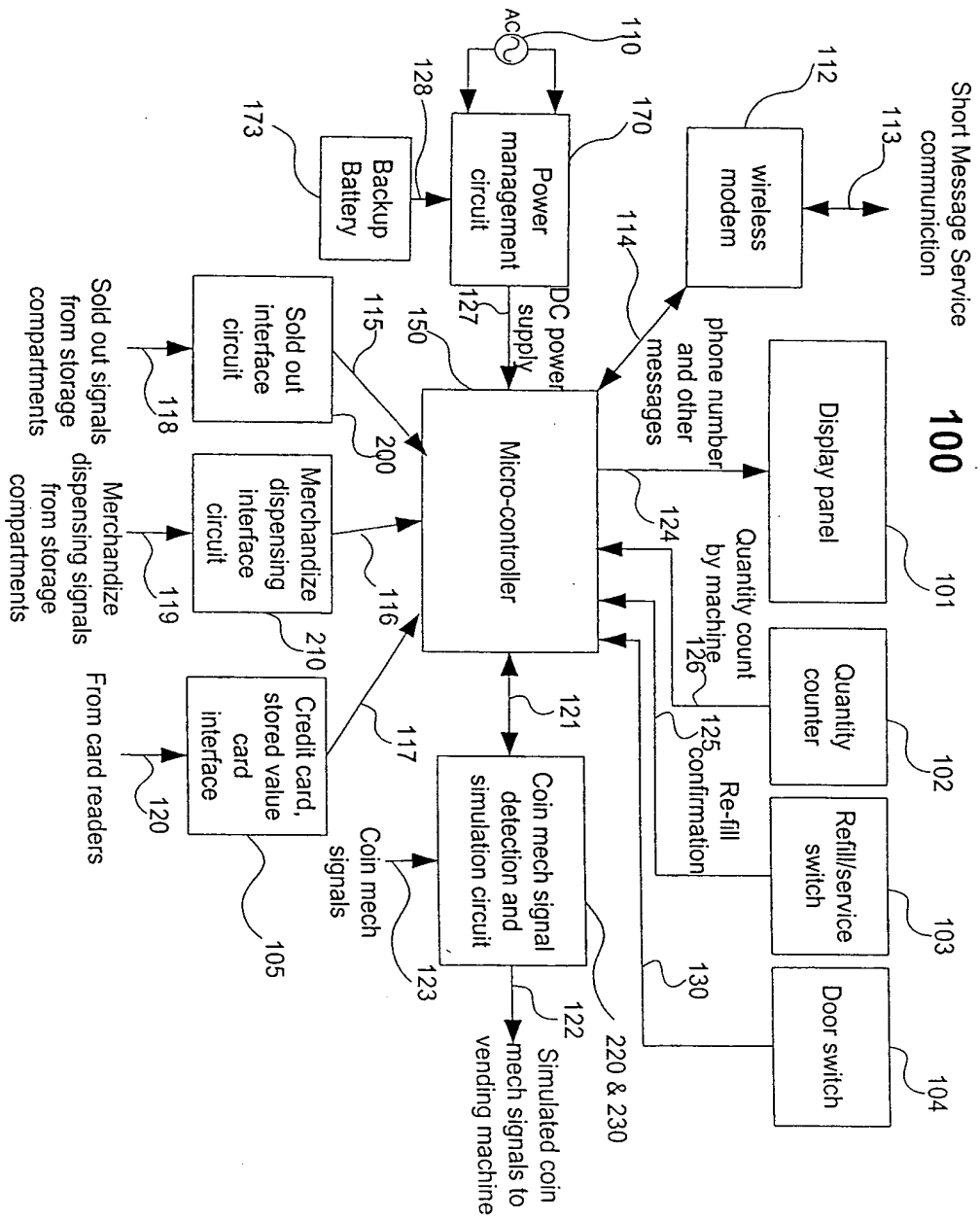


Fig. 3: Block diagram of the Control and Communication Unit (CCU)

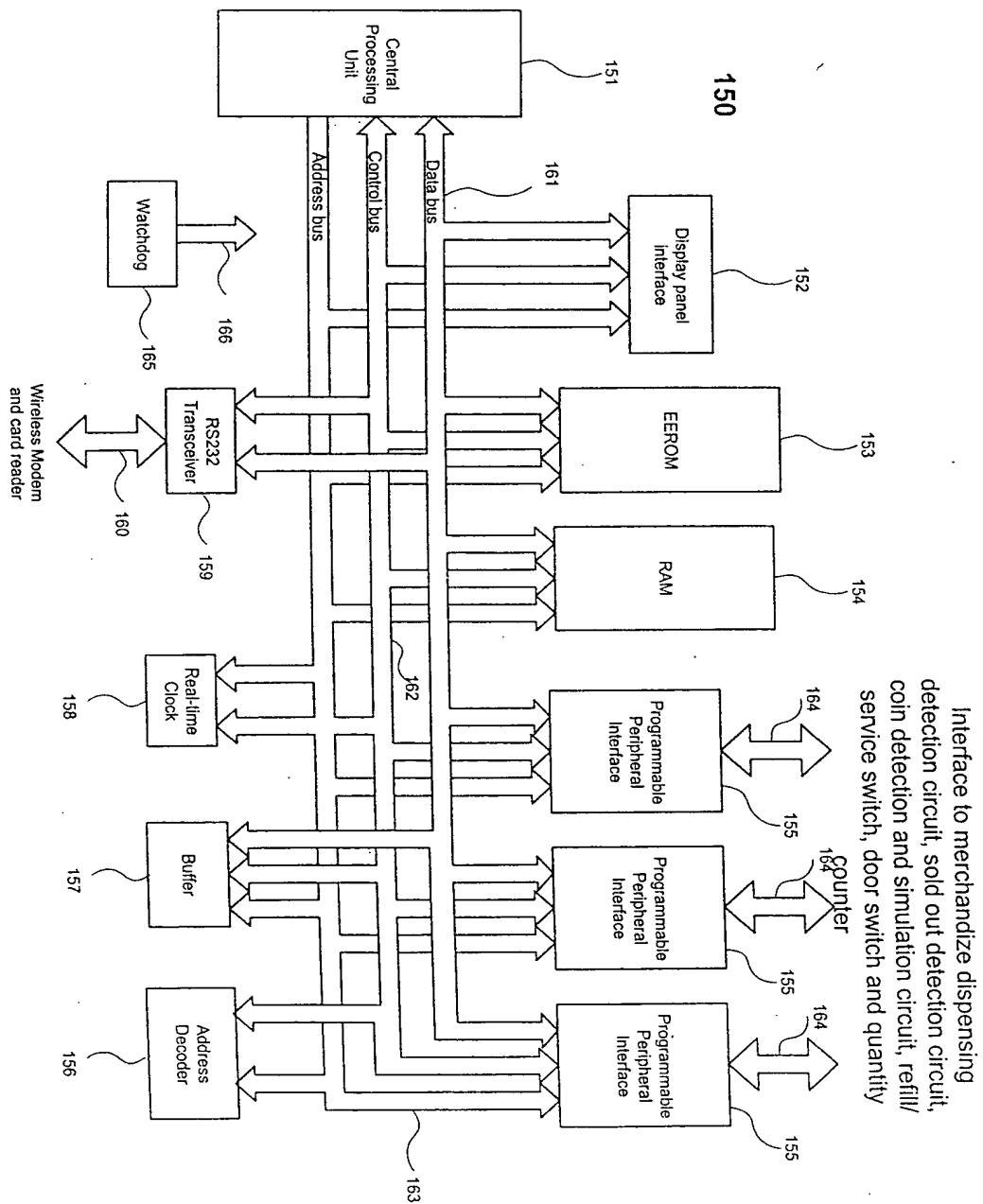


Fig. 4: Schematic diagram of the micro-controller circuit

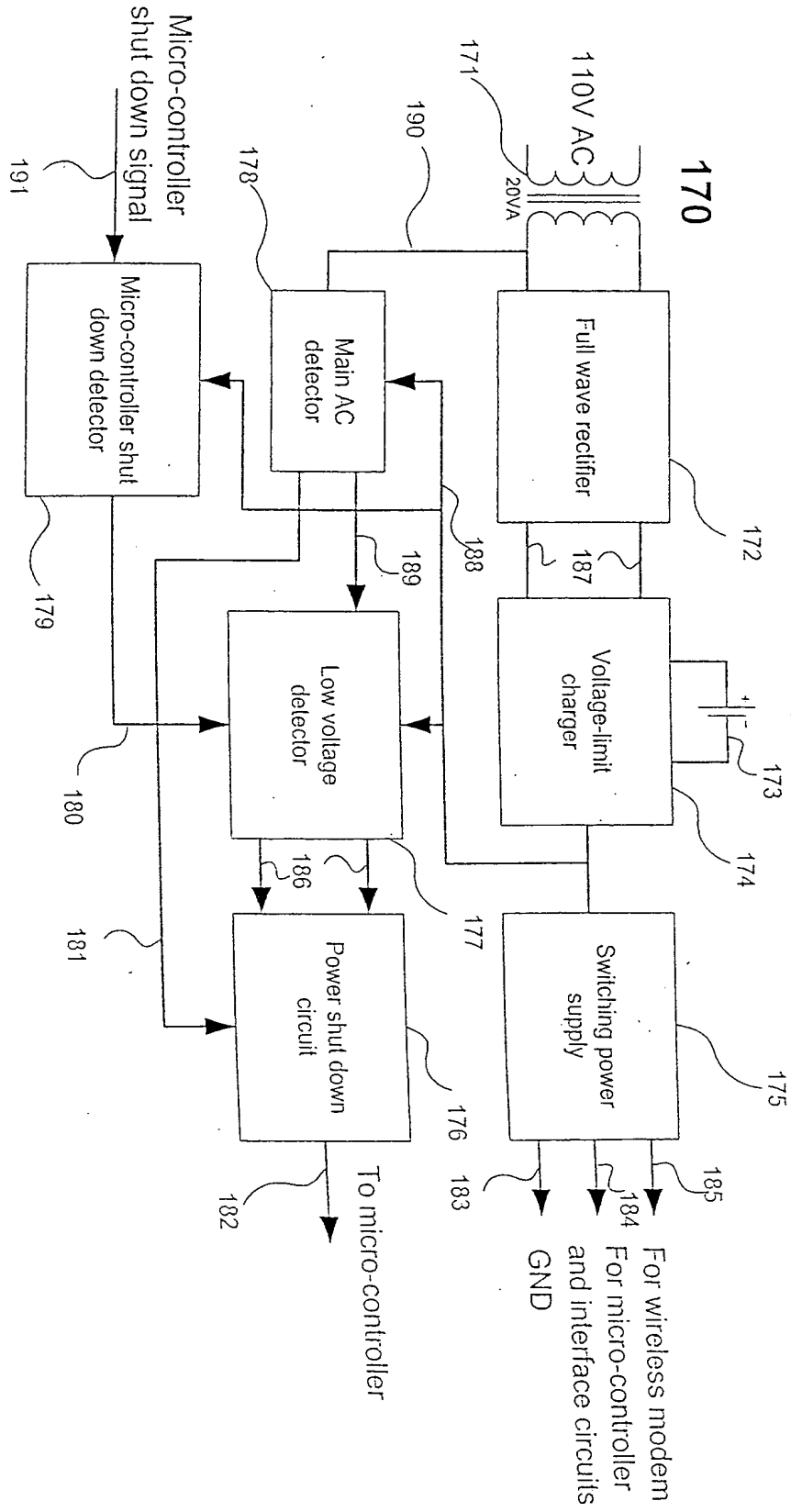


Fig. 5: Schematic diagram of the power management circuit

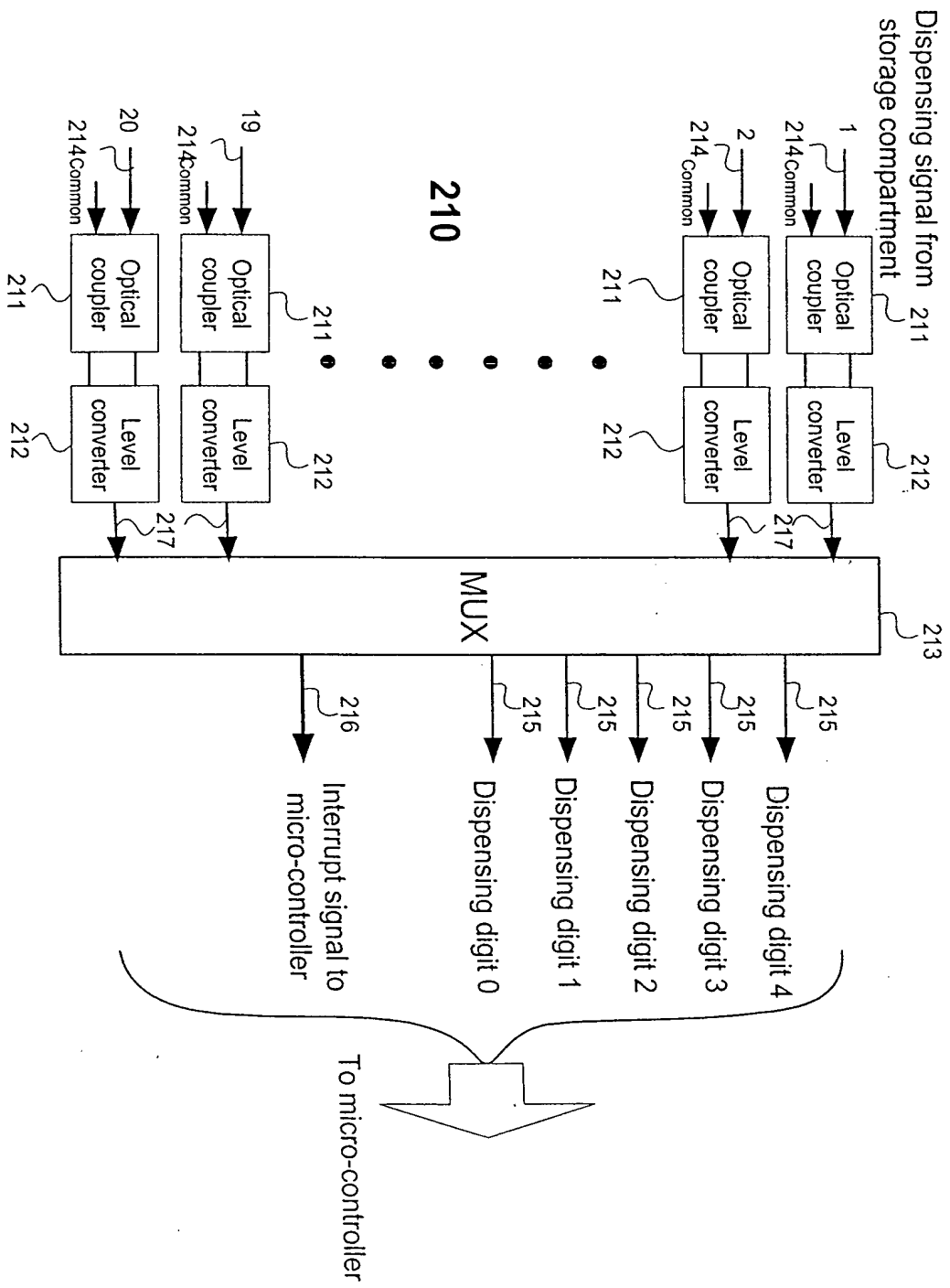


Fig. 6: Schematic diagram of the merchandize dispensing interface circuit

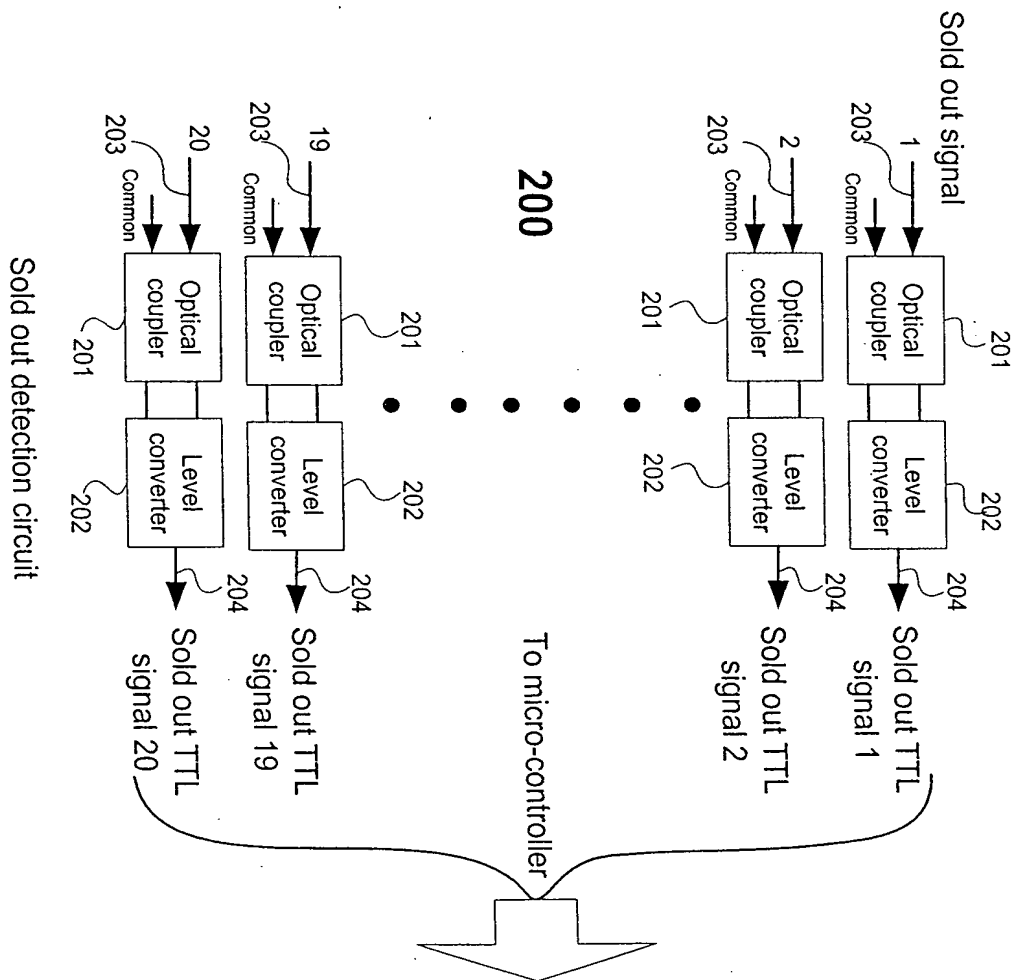


Fig. 7: Schematic diagram of the sold out interface circuit

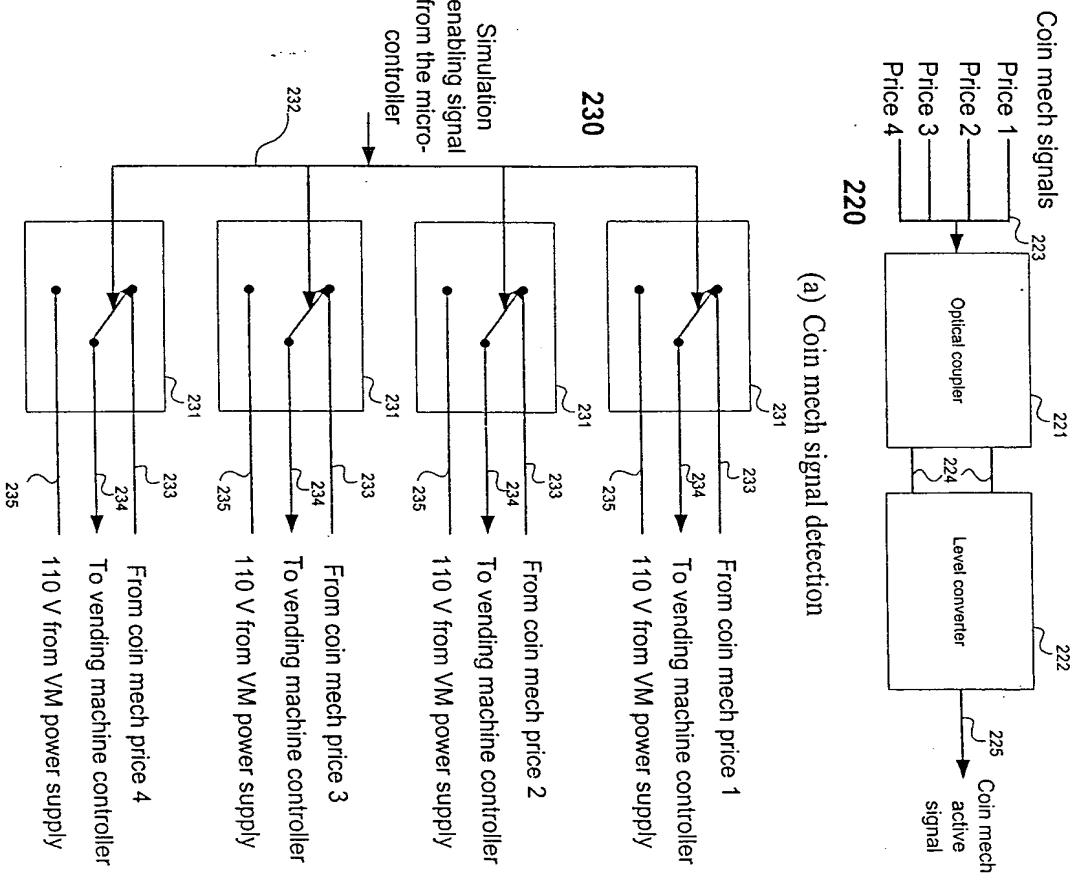


Fig. 8: Schematic diagram of the coin detection and simulation circuit



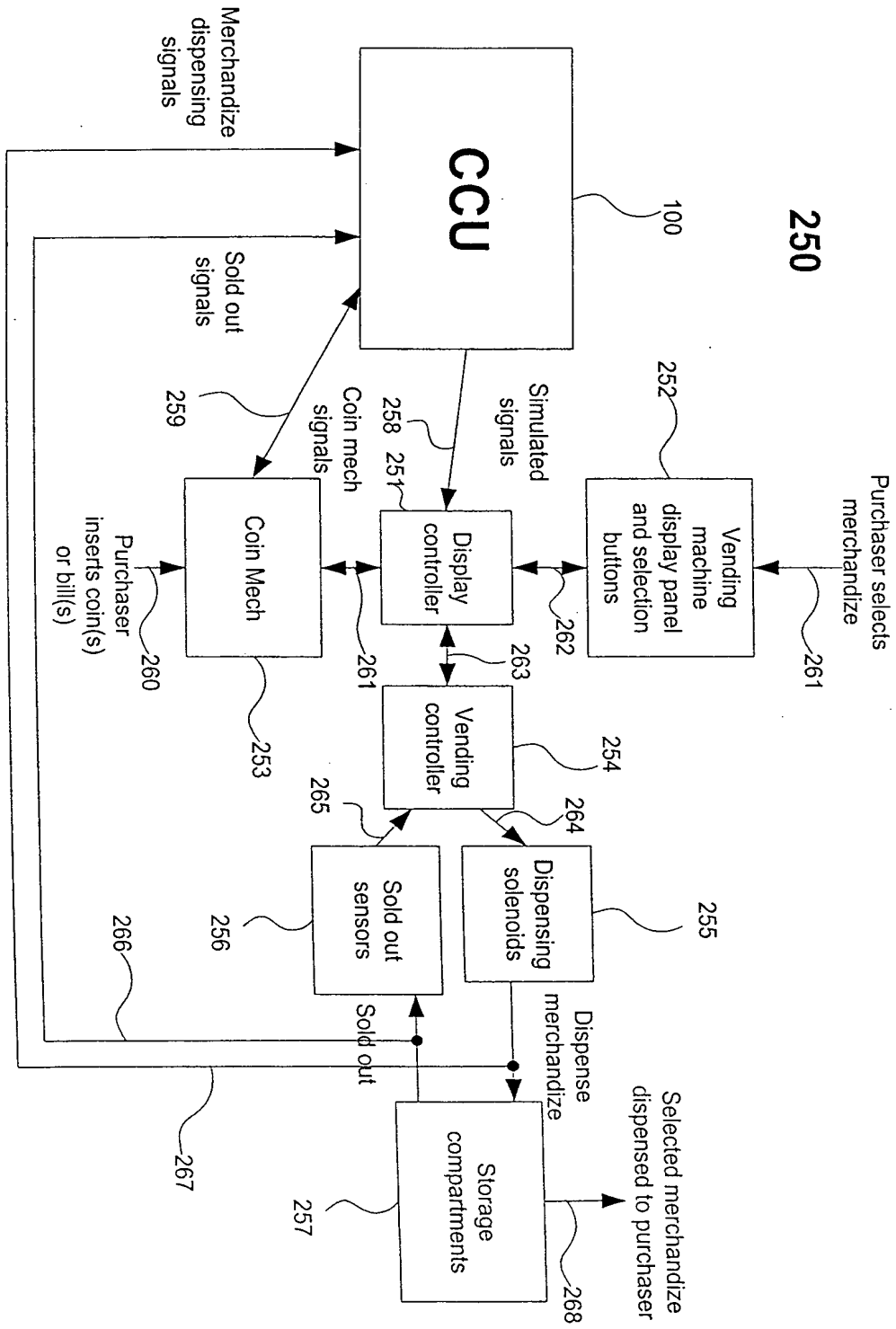


Fig. 9: Interfacing between the CCU and the vending machine of mechanical type

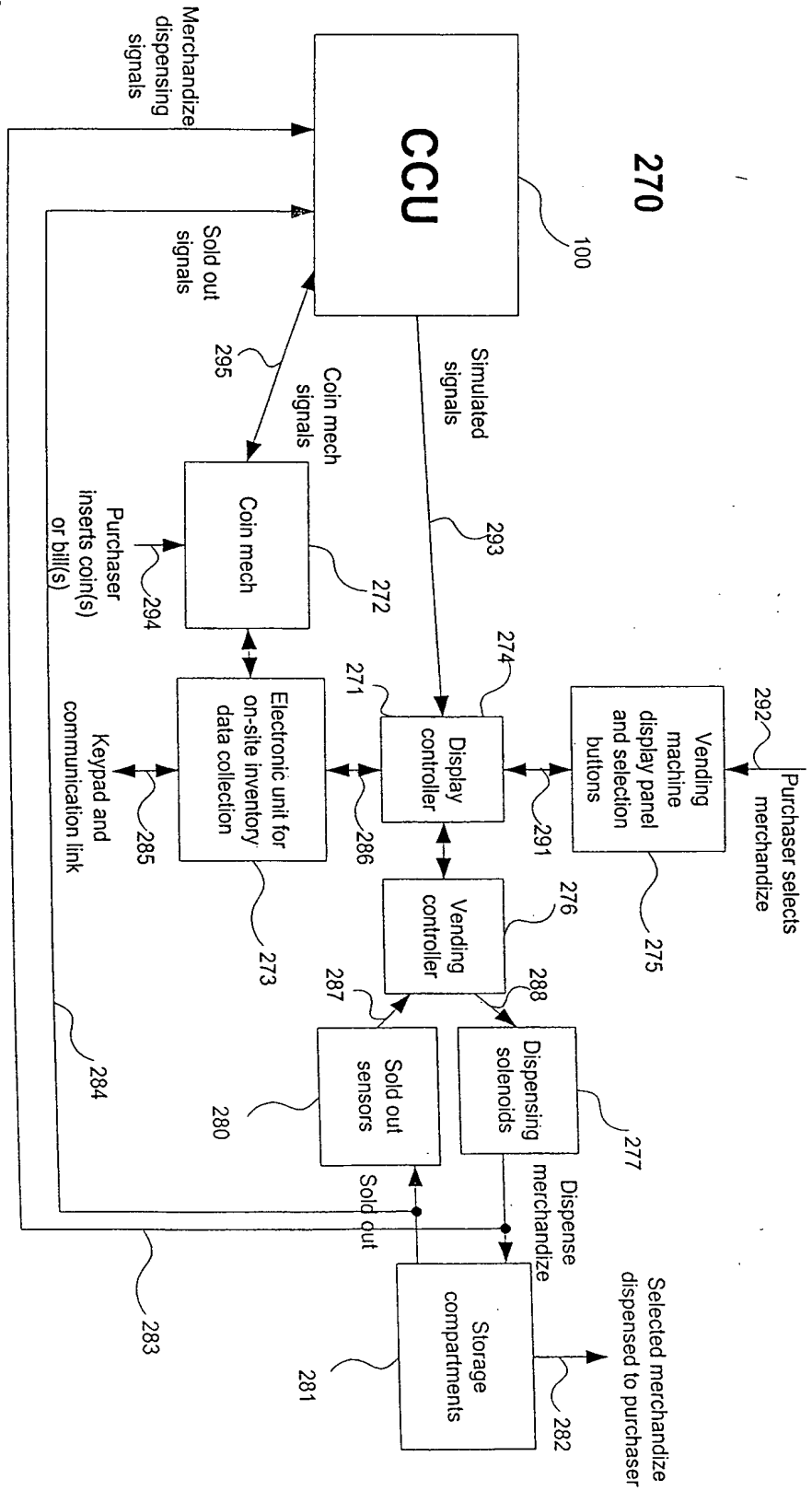


Fig. 10: Interfacing between the CCU and the vending machine of electronic type

(a)

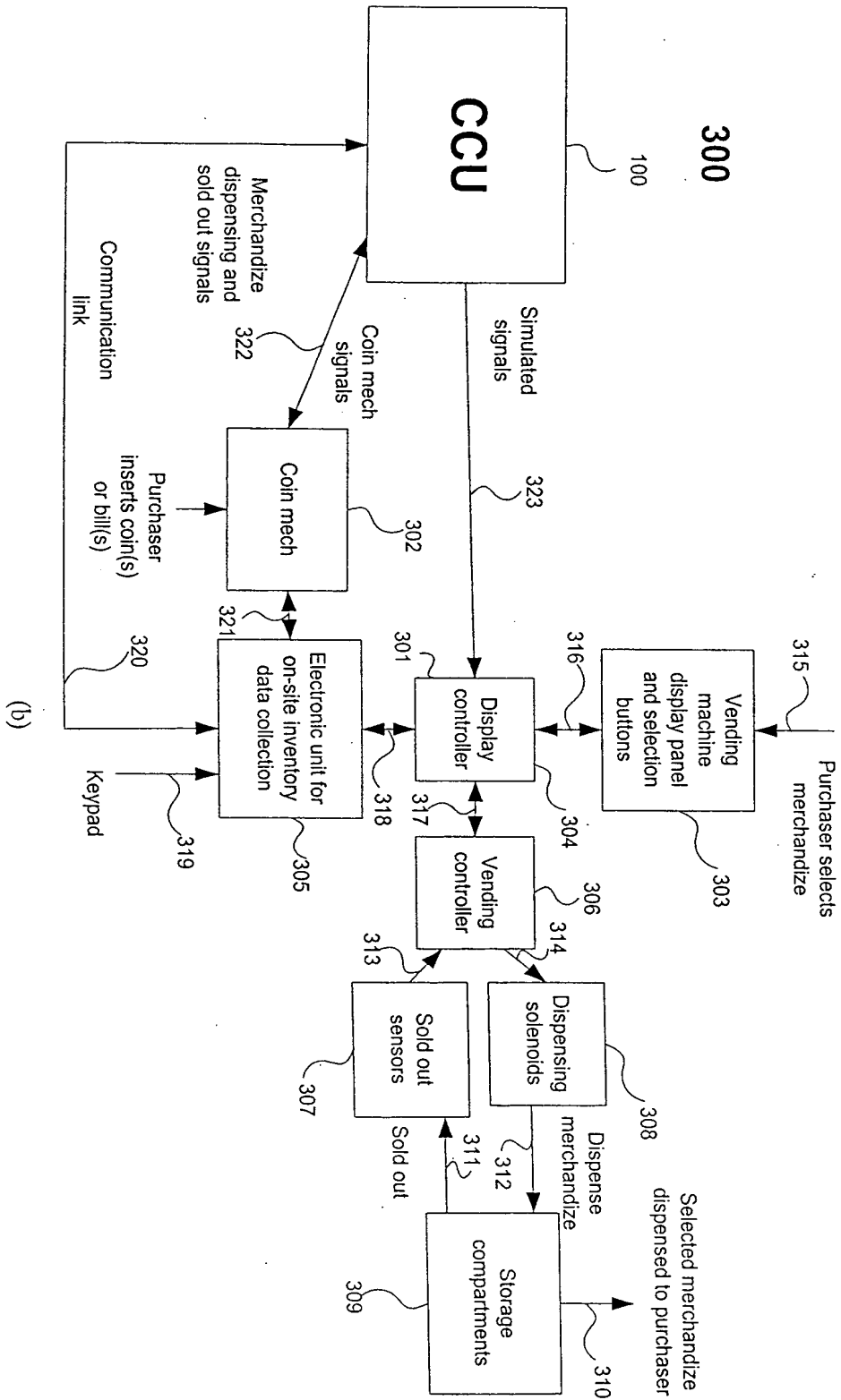


Fig. 10: Interfacing between the CCU and the vending machine of electronic type

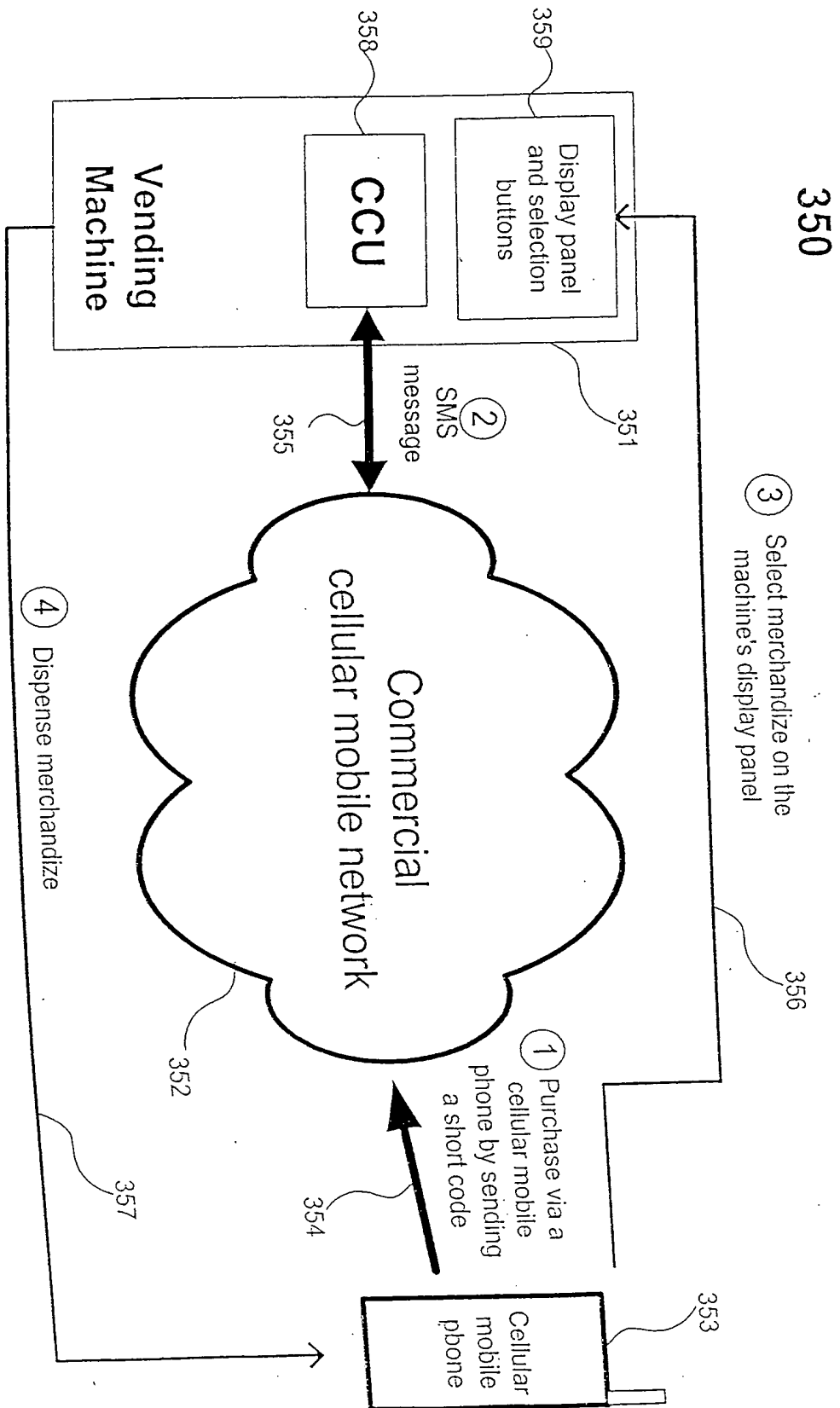


Fig. 11: Concept of wireless purchase through a cellular mobile phone

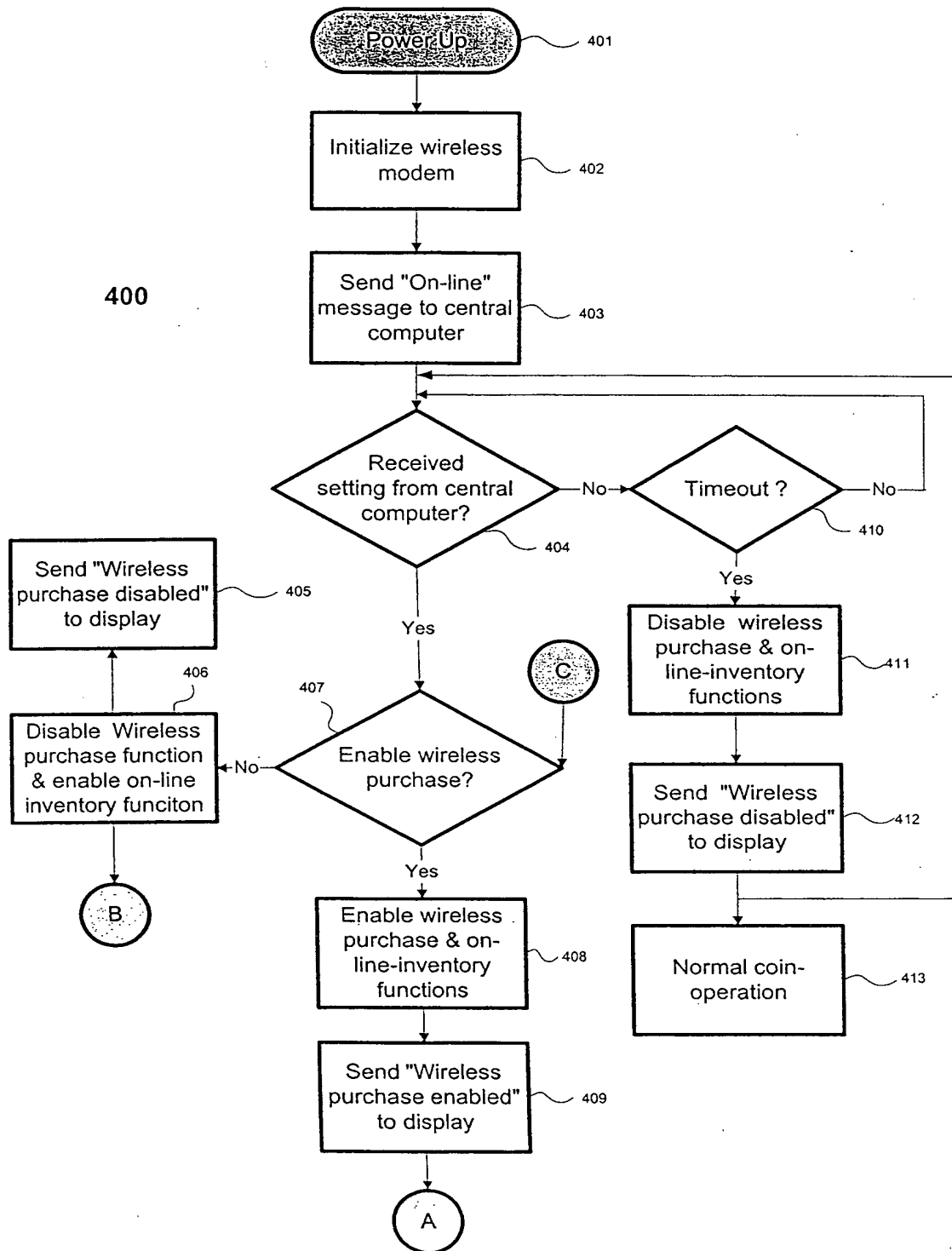


Fig. 12: Command and data flow of wireless purchase

(a)

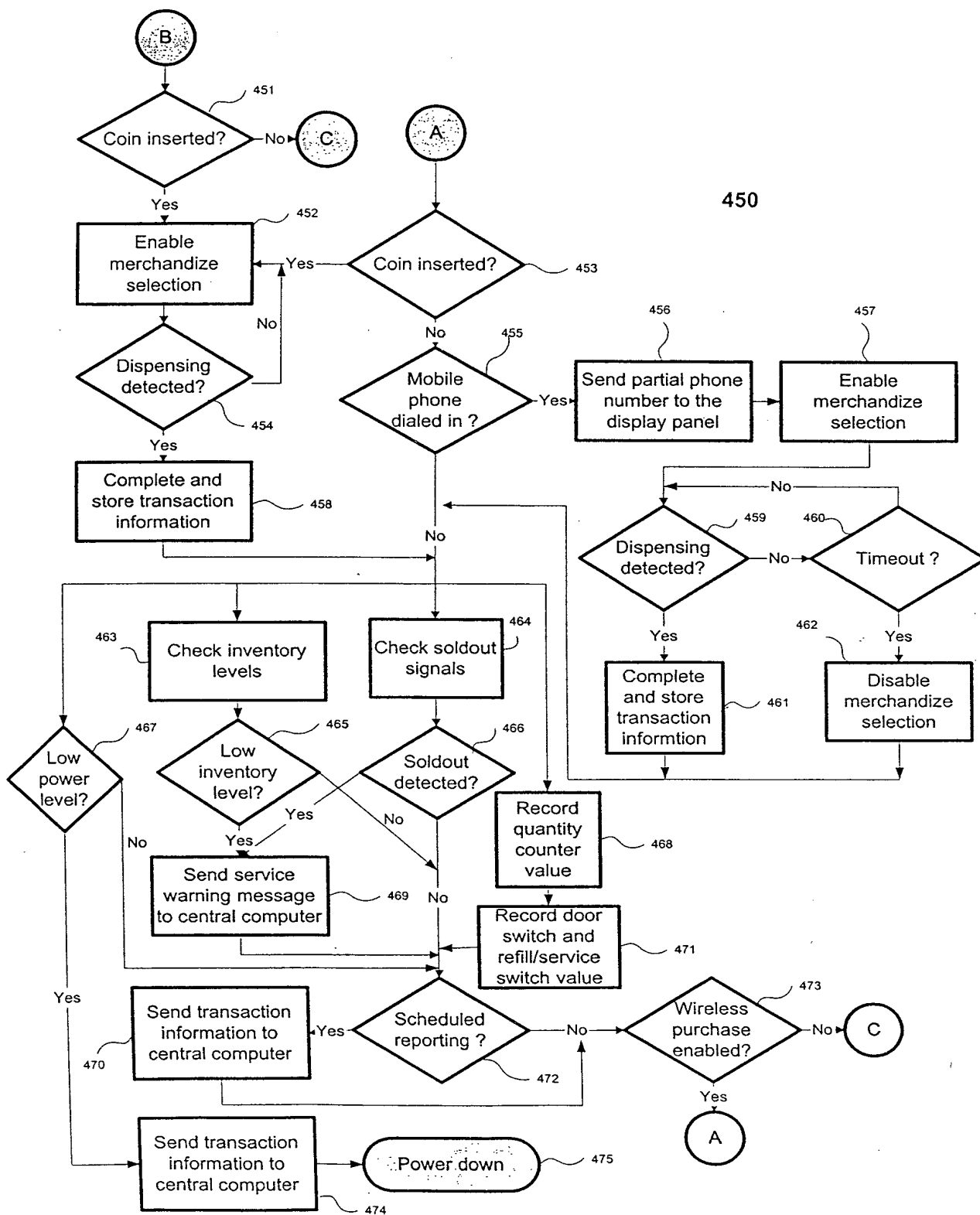


Fig. 12: Command and data flow of wireless purchase

(b)

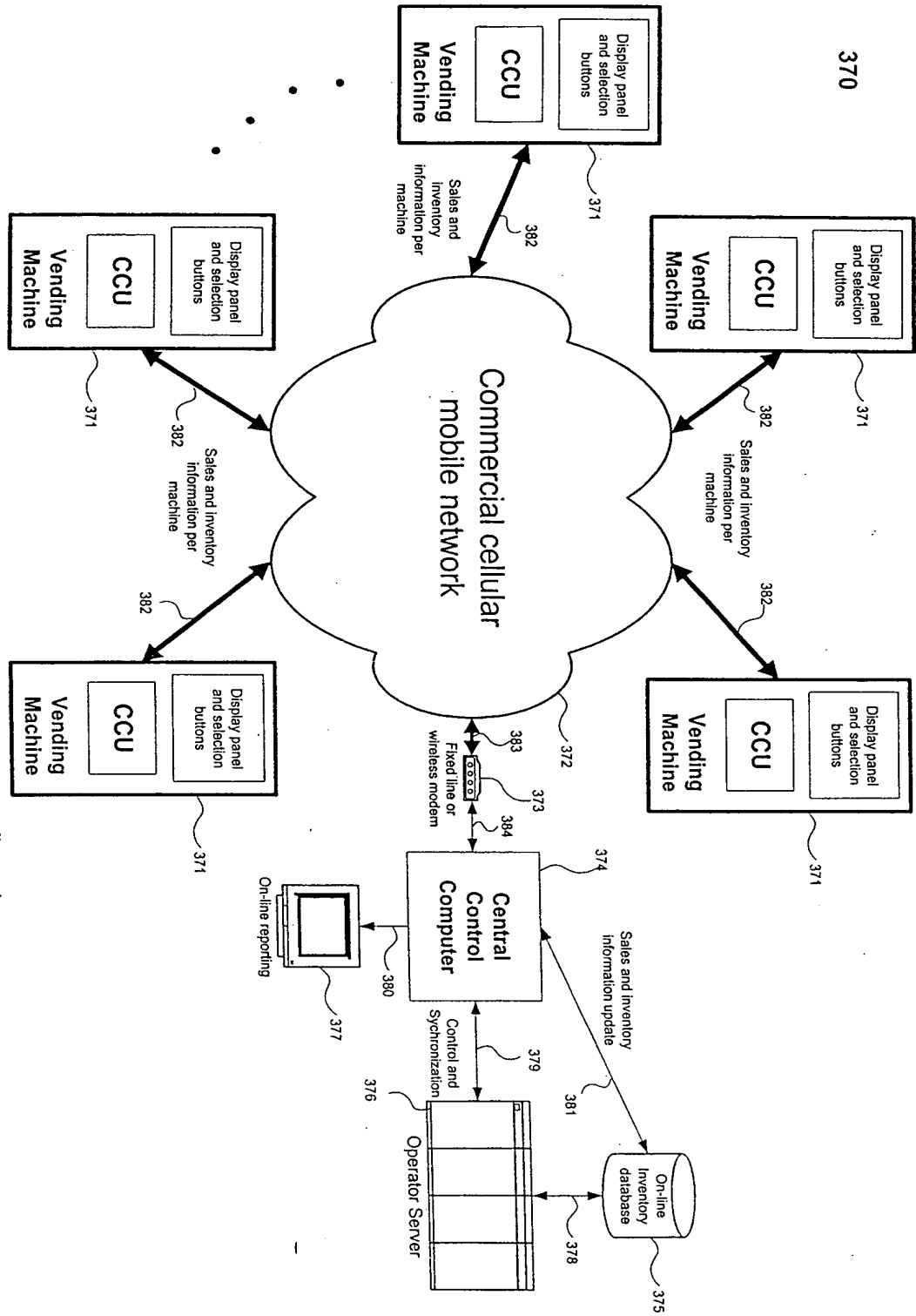


Fig. 13: On-line inventory management configuration

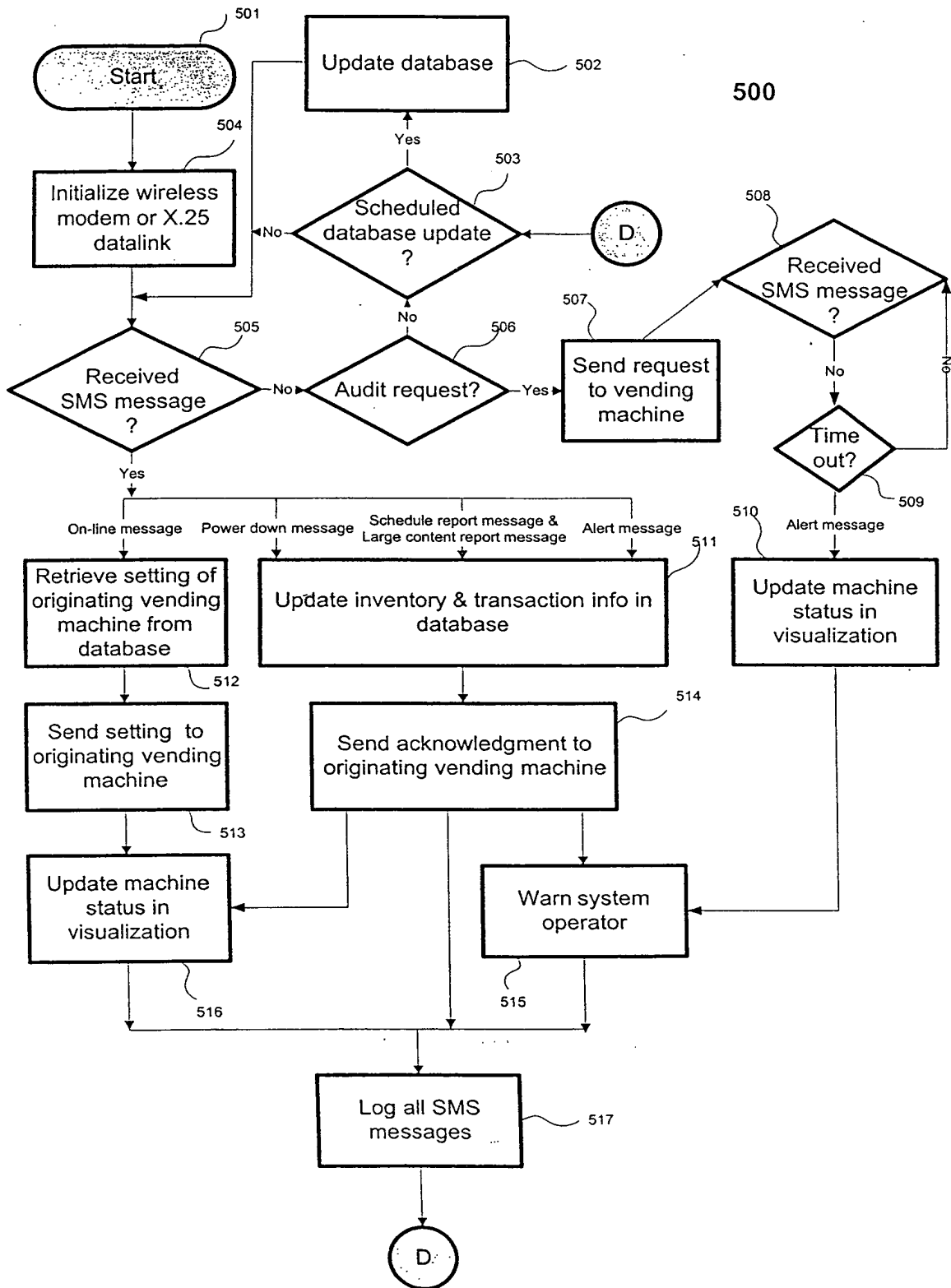


Fig. 14: Command and data flow of on-line inventory